(19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 14 July 2005 (14.07.2005)

PCT

(10) International Publication Number WO 2005/063958 A1

(51) International Patent Classification⁷: 3/39, 3/00

C11D 3/12,

(21) International Application Number:

PCT/JP2004/019700

(22) International Filing Date:

22 December 2004 (22.12.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

2003-433037 26 December 2003 (26.12.2003) JP 2003-433062 26 December 2003 (26.12.2003) JP

- (71) Applicant (for all designated States except US): KAO CORPORATION [JP/JP]; 14-10, Nihonbashi Kayabacho 1-chome, Chuo-ku, Tokyo 103-8210 (JP).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): OKI, Toshihiro [JP/JP]; c/o Kao Corporation, Research Laboratories,, 1334, Minato, Wakayama-shi,, Wakayama 640-8580 (JP). HASUMI, Motomitsu [JP/JP]; c/o Kao Corporation, Research Laboratories,, 1334, Minato, Wakayama-shi,, Wakayama 640-8580 (JP). KOMATSU, Yoshiyuki [JP/JP]; c/o Kao Corporation, Research Laboratories,, 1334, Minato, Wakayama-shi,, Wakayama 640-8580 (JP). NISHIMURA, Hiroshi [JP/JP]; c/o Kao Corporation,

Research Laboratories,, 1334, Minato, Wakayama-shi,, Wakayama 640-8580 (JP).

- (74) Agent: HOSODA, Yoshinori; c/o Hosoda International Patent Office, P.O.Box 26, OMM Building 5th Floor, 7-31, Otemae 1-chome, Chuo-ku, Osaka-shi, Osaka 540-6591 (JP).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: SOFTENING DETERGENT COMPOSITION

$$\begin{bmatrix} R^{1} - C - O - O - O \end{bmatrix}_{n}^{M} \qquad (1)$$

$$\begin{bmatrix} R^2 - C - O & \longrightarrow & COO \\ O & & & n \end{bmatrix}_n M \qquad (2)$$

(57) Abstract: Α softening detergent composition containing (a) 1 to 30% by mass of a clay mineral; (b) 0.5 to 20% by mass of a compound capable of releasing hydrogen peroxide in water; (c) 0.1 to 20% by mass of a compound represented by the following general formula (I) or (II): wherein R1 is an alkyl group having 4 to 13 carbon atoms; R2 is an alkyl group having 5 to 13 carbon atoms; M is hydrogen atom, or alkali metal atom, alkaline earth metal atom, ammonium or alkanolamine, or a combination of both; and 10 to 60% by mass of a component corresponding to a surfactant as prescribed in JIS K 3362:1998, wherein a mass ratio of the component (b) to the component (c) [component (b)/component (c)] is from 3/4 to 20/1. The softening detergent composition is suitably used as a softening detergent for fibrous manufactured articles such as clothes.